

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**In re Patent Application Nos:**

10/368962  
11/812100 Customer No.: 30678  
10/875025  
11/896133  
08/758710  
10/115759  
10/404871  
11/797368  
08/758709  
09/495731  
10/097091  
09/694650  
10/369389  
09/696525  
11/713119  
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09/220184  
09/551969  
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09/781614  
07/510930  
10/872094  
11/273097  
11/984298  
12/203553  
12/404945  
09/253173  
07/013614

**Revocation and Power of Attorney**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

All previous powers of attorney and authorizations of agent are hereby revoked,  
and the undersigned hereby appoints the attorneys and agents of Connolly Bove Lodge &

Hutz LLP associated with U.S. Patent and Trademark Office ("PTO") Customer Number 30678 to prosecute these applications and any U.S., foreign, or international applications under the Patent Cooperation Treaty based on them and to transact all business in the PTO connected therewith, and to receive all communications from the PTO, including the patent documents. Further details about each application are found in the Appendix to this paper. The authority under this Power of Attorney of each person listed under the aforementioned PTO Customer Number shall automatically terminate and be revoked upon such person ceasing to be associated with Connolly Bove Lodge & Hutz LLP.

***Designation of Correspondence Address***

Please associate these applications with PTO Customer Number 30678 and send all notices, official letters, documents, communications, and other correspondence regarding these applications to the address:

Connolly Bove Lodge & Hutz LLP  
1875 Eye Street NW, Suite 1100  
Washington, DC 20006

or to the address currently associated with PTO Customer Number 30678. Please also record the respective Attorney Docket Numbers in the attached appendix in any applicable databases.

***Certificate Under 37 C.F.R. § 3.73(b)***

The Aerospace Corporation is the assignee of the entire right, title, and interest in these patents and applications by virtue of the chains of assignment shown in the attached Appendix, which are recorded in the records of the PTO. To the best of the undersigned's knowledge and belief, the titles are in the name of said assignee. The undersigned, whose title is supplied below, is empowered to sign this certificate on behalf of The Aerospace Corporation.

Signed: Ronald Donald Matthews Date: May 12, 2009  
Name: Ronald Donald Matthews  
Title: Assistant General Counsel  
Authorized Person for The Aerospace Corporation

**APPENDIX: DETAILS OF LISTED APPLICATIONS**

**Application No.: 10/368962**

Confirmation No.: 4239

Patent No. : 6,907,052

Filing Date: February 19, 2003

First Named Inventor: David A. Kozlowski

Title: TUNABLE OPTICAL LOCAL OSCILLATOR

Attorney Docket No.: 27592-00169-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 013795, Frame 0852, on February 19, 2003.

**Application No.: 11/812100**

Confirmation No.: 1457

Patent No.:

Filing Date: June 14, 2007

First Named Inventor: David A. Kozlowski

Title: TUNABLE OPTICAL LOCAL OSCILLATOR

Attorney Docket No.: 27592-00169-US2

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 013795, Frame 0852, on February 19, 2003.

**Application No.: 10/875025**

Confirmation No.: 9714

Patent No. : 6,937,186

Filing Date: June 22, 2004

First Named Inventor: Robert B. Dybdal

Title: MAIN BEAM ALIGNMENT VERIFICATION FOR TRACKING ANTENNAS

Attorney Docket No.: 27592-00170-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 015920, Frame 0655, on October 22, 2004.

**Application No.: 11/896133**

Confirmation No.: 3662

Patent No:

Filing Date: August 29, 2007

First Named Inventor: Robert By Dybdal

Title: MAIN BEAM ALIGNMENT VERIFICATION FOR TRACKING ANTENNAS

Attorney Docket No.: 27592-00170-US2

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 015920, Frame 0655, on October 22, 2004.

**Application No.: 08/758710**

Confirmation No.: 6235

Patent No.: 5,781,845

Filing Date: December 3, 1996

First Named Inventor: Robert B. Dybdal

Title: ADAPTIVE TRANSMITTING ANTENNA

Attorney Docket No.: 27592-00171-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 008349, Frame 0528, on December 3, 1996.

**Application No.: 10/115759**

Confirmation No.: 2337

Patent No.: 6,804,493

Filing Date: April 3, 2002

First Named Inventor: Tien M. Nguyen

Title: MOBILE SURFACE TERMINAL COMMUNICATION SYSTEM

Attorney Docket No.:27592-00172-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 012777, Frame 0888, on April 3, 2002.

**Application No.: 10/404,871**

Confirmation No.: 6222

Patent No. : 6,888,515

Filing Date: March 31, 2003

First Named Inventor: Ivan Bekey

Title: ADAPTIVE REFLECTOR ANTENNA AND METHOD FOR IMPLEMENTING THE SAME

Attorney Docket No.: 27592-00173-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 013956, Frame 0510, on March 31, 2003;

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 018911, Frame 0668, on February 15, 2007.

Assignment from inventors to Bekey Designs, Inc., recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 018917, Frame 0997, on February 22, 2007;

Assignment from Bekey Designs, Inc. to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 018923, Frame 0006, on February 22, 2007;

Assignment from inventors to Bekey Designs, Inc., recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 018989, Frame 0718, on March 12, 2007;

Assignment from Bekey Designs, Inc. to The Aerospace Corporation, recorded in the records of the PTO at Reel 018989, Frame 0734, on March 12, 2007

**Application No.: 11/797368**

Confirmation No.: 9996

Patent No. :

Filing Date: May 2, 2007

First Named Inventor: Ivan Bekey

Title: ADAPTIVE REFLECTOR ANTENNA AND METHOD OF IMPLEMENTING THE SAME

Attorney Docket No.: 27592-00173-US2

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 013956, Frame 0510, on March 31, 2003;

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 018911, Frame 0668, on February 15, 2007.

Assignment from inventors to Bekey Designs, Inc., recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 018917, Frame 0997, on February 22, 2007;

Assignment from Bekey Designs, Inc. to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 018923, Frame 0006, on February 22, 2007;

Assignment from inventors to Bekey Designs, Inc., recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 018989, Frame 0718, on March 12, 2007;

Assignment from Bekey Designs, Inc. to The Aerospace Corporation, recorded in the records of the PTO at Reel 018989, Frame 0734, on March 12, 2007.

**Application No.: 08/758709**

Confirmation No.: 6232

Patent No. : 5,739,788

Filing Date: December 3, 1996

First Named Inventor: Robert B. Dybdal

Title: ADAPTIVE RECEIVING ANTENNA FOR BEAM REPOSITIONING

Attorney Docket No.: 27592-00174-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 008347, Frame 0651, on December 3, 1996.

**Application No.: 09/495731**

Confirmation No.: 5231

Patent No. : 6,725,012

Filing Date: February 1, 2000

First Named Inventor: Siegfried W. Janson

Title: METHOD FOR DEPLOYING AN ORBITING SPARSE ARRAY ANTENNA

Attorney Docket No.: 27592-00175-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 010596, Frame 0527, on February 1, 2000.

**Application No.: 10/097091**

Confirmation No.: 9910

Patent No. : 6,731,240

Filing Date: March 11, 2002

First Named Inventor: Robert B. Dybdal

Title: METHOD OF TRACKING A SIGNAL FROM A MOVING SIGNAL SOURCE

Attorney Docket No.: 27592-00176-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 012703, Frame 0918, on March 11, 2002.

**Application No.: 09/694650**

Confirmation No.: 1584

Patent No. : 6,771,713

Filing Date: October 24, 2000

First Named Inventor: Gee L. Lui

Title: DATA AIDED CARRIER PHASE TRACKING SYSTEM FOR PRECODED CONTINUOUS PHASE MODULATED SIGNALS

Attorney Docket No.: 27592-00177-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 011282, Frame 0702, on October 24, 2000.

**Application No.: 10/369,389**

Confirmation No.: 4618

Patent No. : 6,778,317

Filing Date: February 19, 2003

First Named Inventor: John P. Hurrell

Title: OPTICAL FIBER QUADRATURE DEMODULATOR

Attorney Docket No.: 27592-00178-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 013796, Frame 0112, on February 19, 2003;

Corrective Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 018911, Frame 0668, on February 15, 2007.

**Application No.: 09/696525**

Confirmation No.: 4895

Patent No. : 6,862,324

Filing Date: October 23, 2000

First Named Inventor: Gee L. Lui

Title: DATA AIDED SYMBOL TIMING TRACKING SYSTEM FOR PRECODED CONTINUOUS PHASE MODULATED SIGNALS

Attorney Docket No.: 27592-00179-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 011282, Frame 0612, on October 23, 2000.

**Application No.: 11/713119**

Confirmation No.: 1225

Patent No. :

Filing Date: February 28, 2007

First Named Inventor: Gee L. Lui

Title: DATA AIDED SYMBOL TIMING SYSTEM FOR PRECODED CONTINUOUS PHASE MODULATED SIGNALS

Attorney Docket No.: 27592-00179-US2

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 011282, Frame 0612, on October 23, 2000.

**Application No.: 09/307199**

Confirmation No.: 4524

Patent No.: 6,177,836

Filing Date: May 7, 1999

First Named Inventor: Albert M. Young

Title: FEED FORWARD LINEARIZED TRAVELING WAVE TUBE

Attorney Docket No.: 27592-00180-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 009995, Frame 0842, on May 7, 1999.

**Application No.: 09/220184**

Confirmation No.: 3826

Patent No. : 6,816,026

Filing Date: December 22, 1998

First Named Inventor: ROBERT B. DYBDAL

Title: ORTHOGONAL POLARIZATION AND FREQUENCY SELECTABLE WAVEGUIDE USING ROTATABLE WAVEGUIDE SECTIONS

Attorney Docket No.: 27592-00181-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 009676, Frame 0897, on December 22, 1998.

**Application No.: 09/551969**

Confirmation No.: 2245

Patent No.: 6,724,840

Filing Date: April 15, 2000

First Named Inventor: Samuel S. Osofsky

Title: ADAPTIVE INTERFERENCE CANCELLATION METHOD

Attorney Docket No.: 27592-00202-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 010754, Frame 0712, on April 15, 2000.

**Application No.: 09/482295**

Confirmation No.: 6788

Patent No.: 6,693,979

Filing Date: January 13, 2000

First Named Inventor: Rajendra Kumar

Title: ADAPTIVE SMOOTHING SYSTEM FOR FADING COMMUNICATION CHANNELS

Attorney Docket No.: 27592-00203-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 010532, Frame 0797, on January 13, 2000.

**Application No.: 09/781614**

Confirmation No.: 3808

Patent No.: 6,421,008

Filing Date: February 12, 2001

First Named Inventor: Robert B. Dybdal

Title: METHOD TO RESOLVE INTERFEROMETRIC AMBIGUITIES

Attorney Docket No.: 27592-00204-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 011543, Frame 0295, on February 12, 2001.

**Application No.: 07/510930**

Confirmation No.: 4571

Patent No.: 5,052,780

Filing Date: April 19, 1990

First Named Inventor: Christopher F. Klein

Title: DICHROIC BEAM SPLITTER

Attorney Docket No.: 27592-00210-US1

Chain of Title:

Assignment from the inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 005295, Frame 0082, on April 19, 1990.

**Application No.: 10/872094**

Confirmation No.: 2034

Patent No. : 6,965,343

Filing Date: June 17, 2004

First Named Inventor: Robert B. Dybdal

Title: SYSTEM AND METHOD FOR ANTENNA TRACKING

Attorney Docket No.: 27592-00211-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 015501, Frame 0369, on June 17, 2004.

**Application No.: 11/273097**

Confirmation No.: 3342

Patent No. : 7,463,191

Filing Date: November 14, 2005

First Named Inventor: Robert B. Dybdal

Title: ANTENNA BEAM STEERING AND TRACKING TECHNIQUES

Attorney Docket No.: 27592-00211-US2

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 017234, Frame 0520, on November 14, 2005.

**Application No.: 11/984298**

Confirmation No.: 8304

Patent No. :

Filing Date: November 15, 2007

First Named Inventor: Robert B. Dybdal

Title: SYSTEM AND METHOD FOR ANTENNA TRACKING

Attorney Docket No.: 27592-00211-US3

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 015501, Frame 0369, on June 17, 2004.

**Application No.: 12/203553**

Confirmation No.: 3386

Patent No. :

Filing Date: September 3, 2008

First Named Inventor: Robert B. Dybdal

Title: SYSTEM AND METHOD FOR ANTENNA TRACKING

Attorney Docket No.: 27592-00211-US4

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 017234, Frame 0520, on November 14, 2005.

**Application No.: 12/404945**

Confirmation No.: 2680

Patent No. :

Filing Date: March 16, 2009

First Named Inventor: Robert B. Dybdal

Title: SYSTEM AND METHOD FOR ANTENNA TRACKING

Attorney Docket No.: 27592-00211-US5

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 017234, Frame 0520, on November 14, 2005.

**Application No.: 09/253173**

Confirmation No.: 5303

Patent No.: 6,175,808

Filing Date: February 19, 1999

First Named Inventor: Jason Checksen Chai

Title: LIGHTNING EFFECTS MONITORING AND RETEST EVALUATION

METHOD

Attorney Docket No.: 27592-00212-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 009785, Frame 0008, on February 19, 1999.

Corrective Assignment from inventors to The Aerospace Corporation, recorded in the records of the U.S. Patent and Trademark Office (PTO) at Reel 018912, Frame 0503, on February 15, 2007.

**Application No.: 07/013614**

Confirmation No.: 4833

Patent No. : 5440308

Filing Date: February 12, 1987

First Named Inventor: Robert B. Dybdal

Title: APPARATUS AND METHOD FOR EMPLOYING ADAPTIVE  
INTERFERENCE CANCELLATION OVER A WIDE BANDWIDTH

Attorney Docket No.: 27592-00214-US1

Chain of Title:

Assignment from inventors to The Aerospace Corporation, recorded in the  
records of the U.S. Patent and Trademark Office (PTO) at Reel 004676, Frame 0902, on  
February 12, 1987.